ABSTRACT

A method and apparatus for combining the spectral outputs of multiple light sources to provide a high-efficiency broad-band illuminator for optical metrology is disclosed. The illuminator combines the output radiation from a plurality of broad-band lamps in a novel optical arrangement that creates a virtual source and avoids the use of beam-splitters. Consequently, the illuminator offers increased performance at reduced cost. The illuminator can be optimized and configured for application in a broad class of optical metrology instruments.